

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)							February 2003				
BUDGET ACTIVITY 5 - System Development and Demonstration				PE NUMBER AND TITLE 0604817A - Combat Identification							
COST (In Thousands)		FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost		2892	4985	3541	0	0	0	0	0	0	136754
482	GROUND CID (BCIS)	0	0	3541	0	0	0	0	0	0	126010
902	INDIVIDUAL COMBAT IDENTIFICATION SYSTEM (ICIDS)	2892	4985	0	0	0	0	0	0	0	10744
<p><b><u>A. Mission Description and Budget Item Justification:</u></b> Survivability is one of the seven tenets of the Army Transformation Strategy and combat identification technologies represent an integral part of that strategy as they work to reduce incidents of fratricide. A key survivability enabler is the rapid, reliable identification of friends, foes, and neutrals. Project 482 supports the transition of combat identification technology to the Objective Force with potential application as an embedded solution to the Future Combat System. Project 482 also supports the Combat Identification International Program to develop the North Atlantic Treaty Organization (NATO) interoperable combat identification technology as directed by the Senior National Representatives (Army). Project 902 addresses the individual soldier-to-soldier combat identification mission. Both project lines provide a critical link to ensuring compatibility and interoperability to the Future Combat System and to the Objective Warrior System.</p> <p>This system supports the Objective transformation path of the transformation campaign plan (TCP).</p> <p>FY04 funds support the transition of Combat Identification programs to Future Combat System (FCS).</p>											

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<b><u>B. Program Change Summary</u></b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>
Previous President's Budget (FY 2003)	2989	1995	0	0
Current Budget (FY 2004/2005 PB)	2892	4985	3541	0
Total Adjustments	-97	2990	3541	0
Congressional program reductions				
Congressional rescissions	-14	-57		
Congressional increases		3220		
Reprogrammings		-29		
SBIR/STTR Transfer	-83	-144		
Adjustments to Budget Years			3541	

**Change Summary Explanation:**

FY04 - The \$3.0 million increase is for the transition of Combat Identification technology to the Future Combat System (FCS) and Objective Force. The \$.541M increase is for the Combat Identification International Program.

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)</b>								<b>February 2003</b>		
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>					PE NUMBER AND TITLE <b>0604817A - Combat Identification</b>				PROJECT <b>482</b>	
COST (In Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
482      GROUND CID (BCIS)	0	0	3541	0	0	0	0	0	0	126010
<p><b><u>A. Mission Description and Budget Item Justification:</u></b> Ground Combat Identification (CID) is intended to minimize fratricide while maximizing combat effectiveness given rapidly changing and intense tactical situations.</p> <p>FY04 funding supports the transition of Combat Identification technology to the Objective Force (OF) with potential application as an embedded solution into the Future Combat System (FCS). FY04 funding also supports the Combat Identification International Program to develop the NATO interoperable combat identification technology as directed by the Senior National Representatives (Army).</p>										
<b><u>Accomplishments/Planned Program</u></b>						<b><u>FY 2002</u></b>	<b><u>FY 2003</u></b>	<b><u>FY 2004</u></b>	<b><u>FY 2005</u></b>	
Design and Develop potential Embedded Ground-to-Ground CID Solution						0	0	1750	0	
Design and Develop potential Air-to-Ground CID Solution						0	0	1250	0	
Combat Identification International Efforts to Develop the NATO interoperable combat identification technology						0	0	541	0	
Totals						0	0	3541	0	

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BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>					PE NUMBER AND TITLE <b>0604817A - Combat Identification</b>				PROJECT <b>482</b>	
<b><u>B. Other Program Funding Summary</u></b>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
OPA2, SSN BA0510, Combat Identification Program	5556	982	0	0	0	0	0	0	0	6538
<p><b><u>C. Acquisition Strategy:</u></b> FY04 dollars will fund the FCS Integrated Support Team (FIST) study and analysis of the FCS Combat ID architecture for Block II and beyond. The performing activities to execute this effort are yet to be determined.</p>										

ARMY RDT&E COST ANALYSIS(R-3)									February 2003			
BUDGET ACTIVITY 5 - System Development and Demonstration					PE NUMBER AND TITLE 0604817A - Combat Identification					PROJECT 482		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . B-Kit Development	C/CPAF	TRW, CA	69765	0		0		0		0	69765	69765
b . A-Kit Development (Abrams)	CPFF	GDLS, MI	10909	0		0		0		0	10909	10909
c . A- Kit Development (Bradley)	CPFF	UDLP, CA	3364	0		0		0		0	3364	3364
d . A-Kit Development (Various)	Misc.	E&S, TRW, UDLP, AM General, Raytheon.	5836	0		0		0		0	5836	0
e . Ground-to-Ground Solution Efforts	TBD	TBD	0	0		1295	1Q	0		0	1295	0
f . Air-to-Ground Solution Efforts	TBD	TBD	0	0		1250	1Q	0		0	1250	0
g . Combat Identification International Efforts	TBD	TBD	0	0		541	1Q	0		0	541	0
Subtotal:			89874	0		3086		0		0	92960	84038

ARMY RDT&E COST ANALYSIS(R-3)									February 2003			
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>					PE NUMBER AND TITLE <b>0604817A - Combat Identification</b>					PROJECT <b>482</b>		
II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Matrix Support	MIPR	CECOM, Fort Monmouth NJ	8240	0		145	1Q	0		0	8385	0
b . System Eng/Tech Assistance	T&M/MIPR	Sytex Group, Eatontown NJ	7057	0		175	1Q	0		0	7232	0
c . Test Planning	MIPR	CECOM, Fort Monmouth NJ	437	0		0		0		0	437	0
d . Techinal Support	MIPR	Sandia National Laboratories/IDA	570	0		0		0		0	570	0
Subtotal:			16304	0		320		0		0	16624	0
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Technical Test, Log Demo, SCD, IOTE	MIPR	TECOM, YPG, AZ	3513	0		0		0		0	3513	0
b . Limited User Test	MIPR	TEXCOM	673	0		0		0		0	673	0
c . ASCIET	MIPR	Misc.	6651	0		0		0		0	6651	0

ARMY RDT&E COST ANALYSIS(R-3)									February 2003			
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>					PE NUMBER AND TITLE <b>0604817A - Combat Identification</b>					PROJECT <b>482</b>		
III. Test and Evaluation (continued)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:			10837	0		0		0		0	10837	0
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Program Management	In house support	PM NavSys/TIMS	5454	0		135	1-4Q	0		0	5589	0
Subtotal:			5454	0		135		0		0	5589	0
Project Total Cost:			122469	0		3541		0		0	126010	84038

Schedule Profile Detail (R-4a Exhibit)							February 2003	
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>				PE NUMBER AND TITLE <b>0604817A - Combat Identification</b>				PROJECT <b>482</b>
<u>Schedule Detail</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Milestone B for FCS		3Q						
Design and Develop potential Embedded CID Ground-to-Ground Solution			1-4Q					
Design and Develop potential CID Air-to-Ground Solution			1-4Q					
Transition potential solutions to FCS/OF programs			4Q					
Execute Combat Identification International program efforts			1-4Q					



ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)								February 2003		
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>				PE NUMBER AND TITLE <b>0604817A - Combat Identification</b>					PROJECT <b>902</b>	
COST (In Thousands)	FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
902 INDIVIDUAL COMBAT IDENTIFICATION SYSTEM (ICIDS)	2892	4985	0	0	0	0	0	0	0	10744
<p><b><u>A. Mission Description and Budget Item Justification:</u></b>The identification of friendly forces on future battlefields will be more complex due to the highly mobile, dispersed, non-linear formations found in unconventional warfare. The Individual Combat Identification System (ICIDS) program was terminated by the Army. The decision to cancel the Individual-Combat Identification System (I-CIDS) program in FY 02 was precipitated by the need to fund other high priority programs supporting Army Transformation. The Army recognizes the need to protect soldiers on the battlefield and has already transferred the funding and technology from the ICIDS program to the Land Warrior program in order to integrate this capability into the Land Warrior System. The ICIDS Milestone Decision Authority and Program Executive Office Soldier approved a transition plan detailing the transfer of technology and PM Land Warrior is using these funds to integrate this capability and the technologies into the Land Warrior System. The existing program was restructured to produce ICIDS/Land Warrior compatible equipment, with technology to support the Objective Force. The system will fulfill requirements in the Operational Requirements Document (ORD) for use by Army, Marine and Special Operations Forces. The Integrated Battlefield Combat Identification Situation Awareness System (IBCSAS) is an alternative technology approach to providing soldier to soldier combat identification functionality into the Land Warrior System. The contractor will provide a full scale system demonstration 16 months after contract award. This would allow this technology to be evaluated for potential integration into LW-SI. The system consists of 3 components:</p> <p>1) Man worn combat ID system - IR Laser interrogation, RF response which meets or exceeds CIDDS ORD requirements; 2) Communications and remote situation awareness device - Radio that provides C2 and SA, (moving map display, GPS, and links to man worn CID system, aircraft SA systems and ground vehicle SA systems; 3) Airborne UAV for surveillance that provides comms networking capability and allows SA link to other vehicles. Survivability is one of the seven tenets of the Army Transformation Strategy and ICIDS represents an integral part of that strategy as it works to reduce incidents of fratricide and increase combat effectiveness. This system provides a critical link to ensuring compatibility and interoperability to the Objective Warrior System.</p>										
<b><u>Accomplishments/Planned Program</u></b>						<b><u>FY 2002</u></b>	<b><u>FY 2003</u></b>	<b><u>FY 2004</u></b>	<b><u>FY 2005</u></b>	
Conducted Land Warrior Interoperability Study. Procured nine Land Warrior - Initial Capability (LW-IC) systems with integrated ICIDS capability for a feasibility demonstration.						2892	0	0	0	
Post demonstration fixes to design to reduce weight and optimize integration of combat identification capabilities into LW-Stryker Integration (LW-SI) system development.						0	1765	0	0	
Alternative technology approach to providing soldier to soldier combat identification functionality into the LW-SI system.						0	3220	0	0	

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BUDGET ACTIVITY 5 - System Development and Demonstration				PE NUMBER AND TITLE 0604817A - Combat Identification				PROJECT 902			
<u>Accomplishments/Planned Program (continued)</u>								FY 2002	FY 2003	FY 2004	FY 2005
Totals								2892	4985	0	0
<u>B. Other Program Funding Summary</u>	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost	
OPA2, SSN BA0515 Combat ID/Aiming Light	9964	6811	0	0	0	0	0	0	0	16775	
RDTE, 604713A, D667 Land Warrior	59262	57633	49163	48293	40890	69983	79821	87784	Continuing	Continuing	
RDTE, 0603001, DJ50, Future Warrior Technology	34709	38468	52026	57429	63480	48540	75981	76395	Continuing	Continuing	
OPA3, M80500, Land Warrior	0	0	94827	112159	136710	182468	106664	125526	Continuing	Continuing	
OPA4, MS3610, Land Warrior Initial Spares	0	0	672	741	853	969	490	128	398	4251	
<u>C. Acquisition Strategy:</u> A competitive, cost plus incentive fee (CPIF) contract for the design, fabrication and testing of 50 units was awarded in July 1997. A follow-on Fixed Price (FP), sole source, Low Rate Initial Production (LRIP) contract based on demonstrated technical test results, was awarded in September 2001 for 80 systems to provide an orderly ramp up to production. This program was restructured to produce ICIDS/Land Warrior (LW) interoperable systems. An ECP to the basic design will be awarded to meet LW initial capability (LW-IC) that will be proved out with a feasibility demonstration scheduled for 2Q03. Post demonstration fixes will be made with the LW contractor that will provide 9 LW/ICIDS systems that will reduce weight and optimize integration of combat identification capabilities into the LW -Stryker Integration (LW -SI) system production. The system will also have a migration path for interoperability and commonality with the combat identification functions to be embedded in the Land Warrior equipment suite. The Integrated Battlefield Combat Identification Situation Awareness System (IBCSAS) is an alternative technology approach to providing soldier to soldier combat identification functionality into the Land Warrior System. The contractor will provide a full scale system demonstration 16 months after contract award. This would allow this technology to be evaluated for potential integration into LW-SI.											

ARMY RDT&E COST ANALYSIS(R-3)									February 2003			
BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>					PE NUMBER AND TITLE <b>0604817A - Combat Identification</b>					PROJECT <b>902</b>		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Hardware	C/CPIF	General Dynamics, Scottsdale, AZ	24822	0		0		0		0	24822	24822
b . Land Warrior Interoperability Effort	FFP	LW V1.0 Consortium, Vienna, VA	2553	750	2Q	0		0		0	3303	3304
c . Integrated Battlefield Combat Situational Awareness System	C/CPIF	Boeing, St. Louis, MO	0	3220	3Q	0		0		0	3220	3220
Subtotal:			27375	3970		0		0		0	31345	31346
Remarks: General Dynamics purchased Motorola's Integrated Information Systems Group in 2001.												
II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Sys Eng/Tech Assist	C/T&M	Various	651	220	3Q	0		0		0	871	871
b . Matrix Support	MIPR	Various	921	565	1Q	0		0		0	1486	1509
Subtotal:			1572	785		0		0		0	2357	2380

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BUDGET ACTIVITY <b>5 - System Development and Demonstration</b>					PE NUMBER AND TITLE <b>0604817A - Combat Identification</b>					PROJECT <b>902</b>		
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Test Planning/Execution	MIPR	CECOM, ATEC, WSMR, SLAD	1134	0		0		0		0	1134	1134
b . Development Test, Phase I, II	MIPR	WSMR, OTC, ATEC	679	0		0		0		0	679	679
Subtotal:			1813	0		0		0		0	1813	1813
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Program Management	MIPR/In-house	PM Combat ID, Fort Monmouth, NJ	1191	0		0		0		0	1191	1191
b . Program Management	MIPR/In-house	PM Soldier Warrior, Fort Belvoir, VA	0	230	1Q	0		0		0	230	450
Subtotal:			1191	230		0		0		0	1421	1641
Project Total Cost:			31951	4985		0		0		0	36936	37180

Schedule Profile Detail (R-4a Exhibit)							February 2003	
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<u>Schedule Detail</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Feasibility demonstration		2Q						
Final delivery for prove out demonstration		4Q						
Deliver 9 interoperable systems		4Q						
LW-SI w/ICIDS integration testing			1-4Q					
Conduct LW -SI w/ ICIDS integration IOTE				1-2Q				